

**Amendments to the Claims:**

Please cancel claims 1-39 without prejudice. Please add new claims 40-60, as shown below in the List of Claims:

**List of Claims:**

1-39. Cancelled.

40. (New) A process for the preparation of L-threonine using bacteria of the Enterobacteriaceae family, comprising:

- a) inoculating and culturing a bacterium of the Enterobacteriaceae family in at least a first nutrient medium, said culturing taking place in a fermentation container under conditions allowing for the formation of L-threonine;
- b) abstracting some of the fermentation broth from the culture prepared in step a), wherein more than 90 vol.% of the total volume of the fermentation broth remains in said fermentation container;
- c) topping up the fermentation broth remaining in the fermentation container after the abstraction of step b) with at least one additional nutrient medium, wherein said additional nutrient medium contains at least one source of carbon, at least one source of nitrogen and at least one source of phosphorus, and wherein the concentration of carbon in said fermentation broth is adjusted to a maximum of 30 g/l; and
- d) after the topping up of step c), continuing to culture said bacterium under conditions which allow for the formation of L-threonine.

41. (New) The process of claim 40, wherein said culturing in step a) is carried out by a batch process.

42. (New) The process of claim 40, wherein said culturing in step a) is performed by a fed batch process in which nutrient medium is added to said fermentation container.

43. (New) The process of claim 40, wherein less than 2 vol.% of fermentation broth is abstracted in step b).

44. (New) The process of claim 40, further comprising purifying said L-threonine from said fermentation broth.
45. (New) The process of claim 40, wherein said source of carbon is one or more compounds chosen from the group consisting of: saccharose, molasses from sugar beet or sugar cane, fructose, glucose, starch hydrolysate, cellulose hydrolysate, arabinose, maltose, xylose, acetic acid, ethanol and methanol.
46. (New) The process of claim 40, wherein said source of nitrogen comprises:
  - a) one or more organic nitrogen-containing substances or substance mixtures selected from the group consisting of: peptones; yeast extract; meat extract; malt extract; corn steep liquor; soy bean flour; and urea; and/or one
  - b) or more inorganic compounds chosen from the group consisting of: ammonia; ammonium-containing salts; and salts of nitric acid.
47. (New) The process of claim 40, wherein said source of phosphorus is selected from the group consisting of: phosphoric acid; an alkali metal or alkaline earth metal salt or polymer of phosphoric acid; and phytic acid.
48. (New) The process of claim 40, wherein said bacterium of the Enterobacteriaceae family is of the species *Escherichia coli*.
49. (New) The process of claim 40, wherein steps b) and c) are repeated 5-30 times.
50. (New) The process of claim 40, wherein complete topping up with nutrient media takes at most 2 hours.
51. (New) The process of claim 40, wherein said nutrient feed medium has a phosphorus to carbon ratio (P/C ratio) selected from: not more than 4; not more than 3; not more than 2; not more than 1.5; not more than 1; not more than 0.7; not more than 0.5; not more than 0.48; not more than 0.46; not more than 0.44; not more than 0.42; not more than 0.40; not more than 0.38; not more than 0.36; not more than 0.34; not more than 0.32; and not more than 0.30.
52. (New) The process of claim 40, wherein the culture broth removed is provided with oxygen or an oxygen-containing gas until the concentration of the source of carbon falls below a value selected from: 2 g/l; 1 g/l; and 0.5 g/l.

53. (New) The process of claim 52, further comprising purifying said L-threonine from said fermentation broth.
54. (New) The process of claim 53, further comprising:
- a) removing at least 90% of the biomass from the culture withdrawn in step (b); and
  - b) then removing at least 90% of the remaining water.
55. (New) The process of claim 40, wherein the concentration of the source of carbon during the culture is adjusted to a value selected from: not more than 20; not more than 10; not more than 5 g/l and not more than 2 g/l.
56. (New) The process of claim 40, wherein the yield of L-threonine formed, based on the source of carbon employed, is selected from a value of: at least 31%; at least 37%; at least 42%; at least 48%.
57. (New) The process of claim 40, wherein L-threonine is formed with a space/time yield having a value selected from: 1.5 to 2.5 g/l per h; 2.5 to 3.5 g/l per h; 3.5 to 5.0 g/l per h; and more than 8.0 g/l per h.
58. (New) The process of claim 40, wherein said bacterium of the Enterobacteriaceae family comprises one or more of the following features:
- a) a threonine-insensitive aspartate kinase I - homoserine dehydrogenase I;
  - b) an rpoS gene with a stop codon selected from the group consisting of: opal; ochre; and amber; and a t-RNA suppressor selected from the group consisting of: the opal suppressor; the ochre suppressor; and the amber suppressor.
59. (New) The process of claim 58, wherein said bacterium of the Enterobacteriaceae family further comprises one or more of the following features:
- a) an incapability, under aerobic culture conditions, of breaking down threonine,
  - b) at least a partial need for isoleucine, and
  - c) a capacity to grow in the presence of at least 5 g/l threonine.
60. (New) The process of claim 58, wherein said bacterium of the Enterobacteriaceae family further comprises one or more of the following features:

- a) attenuation of phosphoenol pyruvate carboxykinase, which is coded for by the *pckA* gene;
- b) attenuation of phosphoglucose isomerase, which is coded for by the *pgi* gene;
- c) attenuation of the *YtfP* gene product, which is coded for by the open reading frame *ytfP*;
- d) attenuation of the *YjfA* gene product, which is coded for by the open reading frame *yjfA*;
- e) attenuation of pyruvate oxidase, which is coded for by the *poxB* gene;
- f) attenuation of the *YjgF* gene product, which is coded for by the open reading frame *yjgF*;
- g) enhancement of transhydrogenase, which is coded for by the genes *pntA* and *pntB*;
- h) enhancement of phosphoenol pyruvate synthase, which is coded for by the *pps* gene;
- i) enhancement of phosphoenol pyruvate carboxylase, which is coded for by the *ppc* gene;
- j) enhancement of the regulator *RseB*, which is coded for by the *rseB* gene;
- k) enhancement of the galactose proton symporter, which is coded for by the *galP* gene;
- l) an ability to use sucrose as a source of carbon;
- m) enhancement of the *YedA* gene product, which is coded for by the open reading frame *yedA*;
- n) growth in the presence of at least 0.1 to 0.5 mM or at least 0.5 to 1 mM borrelidin (borrelidin resistance);
- o) growth in the presence of at least 2 to 2.5 g/l or at least 2.5 to 3 g/l diaminosuccinic acid (diaminosuccinic acid resistance);

- p) growth in the presence of at least 30 to 40 mM or at least 40 to 50 mM  $\alpha$ -methylserine ( $\alpha$ -methylserine resistance);
- q) growth in the presence of not more than 30 mM or not more than 40 mM or not more than 50 mM fluoropyruvic acid (fluoropyruvic acid sensitivity);
- r) growth in the presence of at least 210 mM or at least 240 mM or at least 270 mM or at least 300 mM L-glutamic acid (glutamic acid resistance);
- s) at least a partial need for methionine;
- t) at least a partial need for m-diaminopimelic acid;
- u) growth in the presence of at least 100 mg/l rifampicin (rifampicin resistance);
- v) growth in the presence of at least 15 g/l L-lysine (lysine resistance);
- w) growth in the presence of at least 15 g/l methionine (methionine resistance);
- x) growth in the presence of at least 15 g/l L-aspartic acid (aspartic acid resistance); or
- y) enhancement of pyruvate carboxylase, which is coded for by the *pyc* gene.